

problem or, if it is, how it traveled overland.

The affected rivers seem significantly changed. Although some fish species, including catfish and carp, have come through unharmed, others, including smallmouth bass and redbreast sunfish, have been devastated. After the 2006 fish kills, state scientists estimated that in sections of the Shenandoah, 80% of the smallmouth bass had died. "I think we're talking millions of fish," said Jeff Kelble, the Shenandoah Riverkeeper. State officials said they have no way of estimating the total number of fish killed.

The Shenandoah's famous bass fishery is not officially dead, but the kills have made an economic dent. Last year, a James Madison University researcher estimated that the gruesome kills had kept 2,100 fishermen away from the Shenandoah area, at a cost of \$686,000 to the local economy and the state. At Mass Creek Fly Fishing in Harrisonburg, VA, Colby Trow said many clients — once drawn by the Shenandoah's famous bass — had stopped coming. "They basically just said, 'We'll keep in touch, but we won't be back until that river's clean,'" Trow said.

Bob Cramer, a fishing guide in Dayton, VA, had been taking clients from Northern Virginia out on the Shenandoah for \$300 a day. Now he's helping a friend install invisible pet-control fencing for \$45 a day. But Cramer said the loss was more than financial. It is a sin, he said, that the rural stream seemed to be more toxic than big-city rivers. "To me, it's just an embarrassment," Cramer said. "We live in such a beautiful place, and we have such terrible water quality."

Source: David A. Fahrenthold, *Washington Post*, 6/20/07

## Illinois River (OK/AR) Poultry Waste Issues

A federal judge sided with the state of Oklahoma in mid June on several legal challenges brought by the poultry industry in the state's case against 13 companies it says polluted the Illinois River with poultry litter. Judge Gregory Frizzell of the U.S. District Court for the Northern District of Oklahoma denied the requests to dismiss the case on procedural grounds and said the state should be allowed to use private lawyers that would be paid a percentage of any winnings.

But Jay Jorgenson, an attorney for Arkansas-based *Tyson Foods*, argued that the use of contingency fee lawyers created a "bounty system" where attorney's private interests could influence their decisions. But Oklahoma Attorney General Drew Edmondson (D) countered that the state did not have the resources to pursue the case without help. He said without the lawyers, it was "entirely likely the state would not be able to continue" with the suit and the pollution of the Illinois River watershed would continue.

Edmondson claims poultry litter spread on fields in the watershed (mostly in Arkansas) is polluting the river and Lake Tenkiller in Oklahoma with excessive nutrients, particularly phosphorus, and other hazardous substances. Additionally, Tahlequah, OK, uses Lake Tenkiller as drinking water. Oklahoma maintains that the entire 1-million acre Illinois River watershed qualifies as a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Superfund site because of the poultry litter runoff from fields in the watershed. Edmondson further claims that the poultry companies are responsible for cleaning it up. But the outside lawyers Edmondson has hired under the contingency-fee contract would get 33-50% of any settlement and those funds would not go for restitution or payment for cleaning up the watershed



The two-pronged attack against contingency-fee lawyers includes questions of state law on separation of powers as well as a recent decision by the Tenth Circuit Court of Appeals that restricts the use of money recovered as damages in a federal Superfund lawsuit. The money can only be used to pay for specific natural resource damages and not punitive damages or attorneys' fees, attorneys for *Tyson Foods* said in their filings. Judge Frizzell said the contingency fee lawyer issue could be brought up again later in the

case. The judge also dismissed one claim in the suit that sought to apply two Oklahoma state laws to the largely Arkansas-based companies. Earlier he rejected a request from the state of Arkansas to intervene, and in November 2005, when Arkansas Attorney General Mike Beebe (D) asked the Supreme Court to intervene in the case, they declined.

In other developments, Edmondson said a request by the poultry industry to draw a jury pool from outside the northeastern Oklahoma area doesn't "make any sense" to him. The motion filed on behalf of the poultry companies calls for a judge to seek a jury from outside the federal court's northern district and suggested a Wichita, KS-based jury pool would be the most practical alternative. Edmondson said, "I won't say it's the silliest motion I've heard so far, but it ranks in there." A hearing on the jury pool issue has yet to be scheduled.

Sources: *AP/ArkansasOnline.com*, 6/16/07; John L. Moore, *Northwest Arkansas Morning News*, 6/15/07; and *Greenwire*, 6/19/07

## Iowa's Biofuels Pollution Problems

Some parts of Iowa may not have enough water to support projected levels of biofuels development state regulators said in early June. The last statewide water use inventory was completed a dozen years ago when biofuels plants used less than 5% of the state's water. They now use 7% and that could grow to 14% by 2012 after planned expansions and new plants come online, according to a study released last year by the *Institute for Agriculture and Trade Policy*.

"It frankly is one of our important natural resource issues," Iowa Department of Natural Resources (DNR) geologist Robert Libra said. "We haven't paid attention to the water supply in a long time. We need to do so before there is a panic." The state Legislature allocated \$480,000 to update water records that have not had a full review since the mid-1990s. Those studies suggested water resources were already poor in most of west-central and southern Iowa, fair in the state's northwest corner and good in the northeast.

Biofuels production plant operators say they have reduced the amount of water needed to produce ethanol, but their

facilities still need abundant local water supplies. A single plant producing 100 million gallons of ethanol per year uses as much water as a town of approximately 10,000 people, according to state DNR reports.

Meanwhile, destroying trees and native grasses on land held in conservation to plant more corn for biofuels production will reverse decades of work in the state to prevent crop-related pollution, scientists said. Iowa-based researchers suggest that state farmers will put 500,000 acres of Conservation Reserve Program lands back into production so that they can grow corn for ethanol use.

In 1985, the federal government created the Conservation Reserve Program to reduce soil erosion nationally, stabilize land prices and control agricultural over-production. Iowa has 2 million acres enrolled in that program. "These are historic changes that have people worried about the environmental consequences," Iowa State University Center for Agricultural and Rural Development Director Bruce Babcock said. "We will have more soil erosion, more chemical runoff and less habitat ... There is no free lunch.

Also, of Iowa's 34 biofuels production plants, 11 were cited by the state DNR for wastewater violations over the past six years, according to agency records. The violations included polluting streams based on permit limits under the federal Clean Water Act. According to the *Iowa Environmental Council*, the concentrations of chloride and other suspended solids, mainly salts, coming from ethanol plants are among the highest of any industry in the state. Ethanol production requires purified water, and when biofuels production plants treat the water, their sewage discharges can include toxic salt levels and high iron levels.

The *Siouxland Energy & Livestock Coop* in Sioux Center is one plant that has had repeated water pollution problems, according to state DNR records. In November 2003, it accumulated five pages of violations, including emitting 13 times as many salts and other dissolved solids as its permit allowed.

Sources: Perry Beeman, *Des Moines Register*, 6/3/07; and *Greenwire*, 6/4/07

## Coalbed Methane Issues

A Colorado water judge ruled in early July that energy companies wanting to drill coalbed methane (CBM) wells must prove that they are not harming nearby ground-water supplies. Two families in Bayfield, CO, sued the state engineer's office in 2005, arguing that it had not done enough to protect their water rights from CBM operations. Judge Gregory G. Lyman of the Durango-based court ruled the state engineer "cannot allow out-of-priority water diversions" even for CBM water without a well permit.

The ruling requires energy companies to show that when they use water to extract methane gas they are using the water for "beneficial use," a legal term that puts the operations under the state engineer's decision. "The court has properly found that the gas industry can't keep jeopardizing our way of life and that the state can't keep ignoring that they are," said Jim Fitzgerald, one of the plaintiffs. But lawyers for the engineer's office argued that the *Colorado Oil and Gas Conservation Commission* had jurisdiction over the water because it was a by-product of methane operations. *BP America Production Co.*, which owns 1,200 CBM wells in La Plata County in southwestern Colorado, supported the state's position. "The company will continue to comply with the state's water laws," said Dan Larson, a BP spokesman. "This decision creates confusion over the application of those laws, and we trust the state will move quickly to clarify these issues," Larson said.

State and industry attorneys said they were reviewing the case and have not yet decided whether they will appeal. Industry officials have said that a ruling for the plaintiffs would be detrimental for the energy industry. But Sarah Klahn, a Denver attorney representing the plaintiffs, said "Paying \$200 for a well permit or the expense associated with an augmentation plan is hardly catastrophic for this industry."

Meanwhile, in Wyoming the declining populations of sage grouse in the Powder River Basin could be the result of increased CBM activity, according to a study released in early July. The peer-reviewed study by University of Montana professor Dave Naugle shows that from 2000 to 2005, sage grouse populations declined by 86% near CBM drilling

activities in the basin, while populations outside drilling areas declined by 35%. The study said that CBM development exceeds wildfires, sagebrush control and cropland conversion as the top cause of habitat loss for sage grouse populations. Critics of methane drilling say the studies reaffirm their concerns. "This is a real wake-up call to BLM that they are going to have to make serious changes in the way they are permitting the design of oil and gas projects throughout the range if they want to prevent that bird from heading to extinction," said Erik Molvar, biologist for the *Biodiversity Conservation Alliance*.

The Bureau of Land Management (BLM) has promised to take the new information into account in future decisions. "...these peer-reviewed studies will help inform management decisions in Wyoming in the months and years to come," Wyoming BLM Director Bob Bennett said. "The BLM encourages anyone interested in sage grouse to familiarize themselves with this important research." But BLM spokesman Steven Hall said it's too early to say exactly how the agency may modify permit stipulations based on this new research. Hall stressed that any action BLM takes will be in cooperation with other agencies and stakeholders. "It's not something BLM can do on its own," Hall said.

The *Petroleum Association of Wyoming* declined to comment on the results of the studies. Critics of the BLM's management of oil and gas activity in Wyoming said the study results prove what the industry and the BLM have ignored for years.

Sources: Kim McGuire, *Denver Post*, 1/3/07; Dustin Bleizeffer, *Casper [WY] Star-Tribune*, 7/4/07; *Greenwire*, 7/5 and 7/6/07

## Restoring Natural Flood Plains

According to two Washington University (St. Louis) experts, floods forecast along the lower Missouri River didn't materialize this spring because of upstream floodplain restoration projects. Robert E. Criss is a professor in the Department of Earth and Planetary Sciences and Edward J. Heisel is an attorney for the School of Law's *Interdisciplinary Environmental Clinic*. In a *St. Louis Post Dispatch* article, Criss and Heisel said "River gauges between Kansas City and Hermann showed a significant decrease in the peak discharge as the flood moved downstream. The water escaped from the river into the flood plain."